FIG. 1

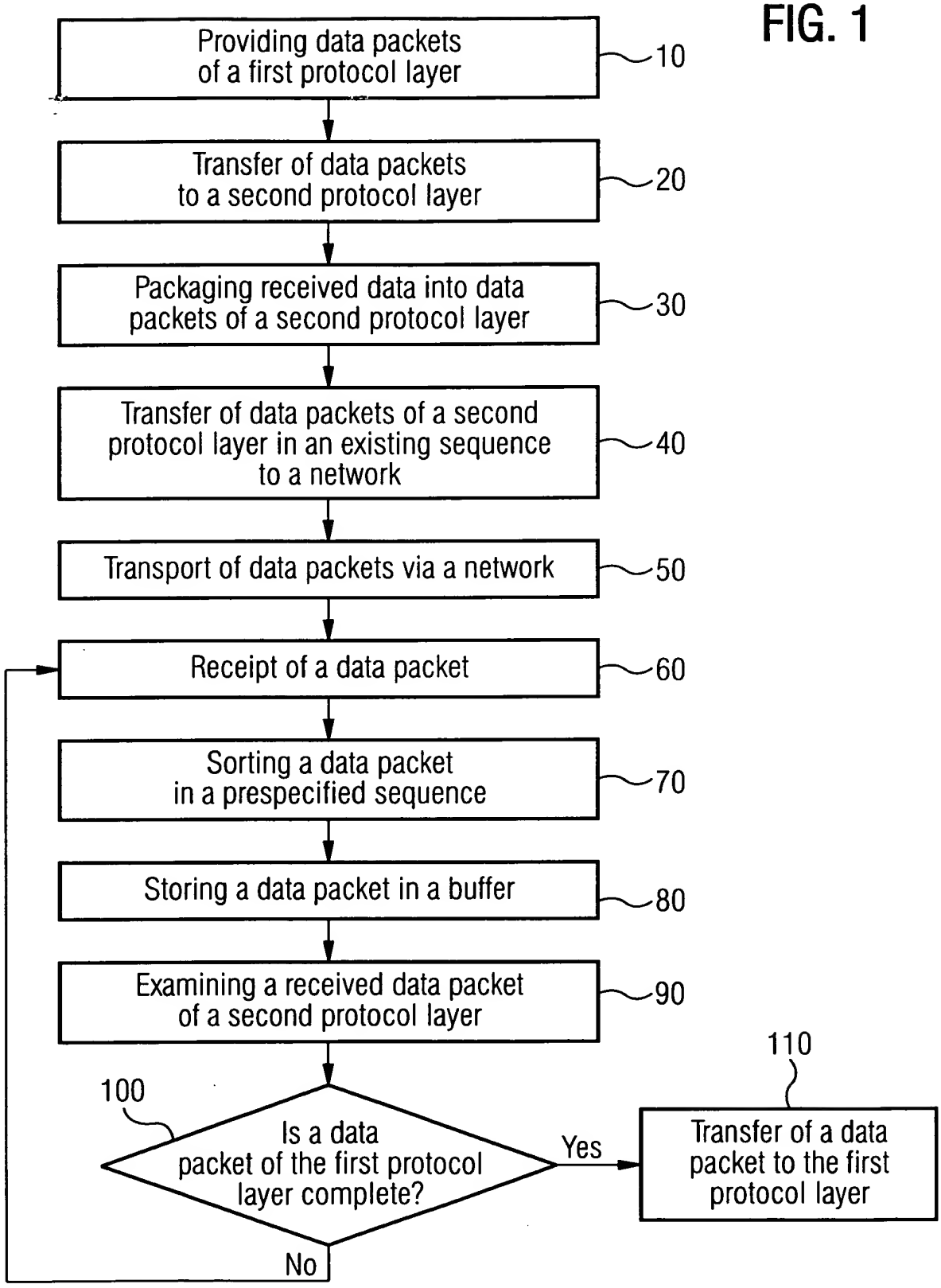

Providing data packets of a first protocol layer
10
Transfer of data packets to a second protocol layer
20
Packaging received data into data packets of a second protocol layer
30
Transfer of data packets of a second protocol layer in an existing sequence to a network
40
Transport of data packets via a network
50
Receipt of a data packet
60
Sorting a data packet in a prespecified sequence
70
Storing a data packet in a buffer
80
Examining a received data packet of a second protocol layer
90
100
Is a data packet of the first protocol layer complete?
Yes
No
110
Transfer of a data packet to the first protocol layer

FIG. 2

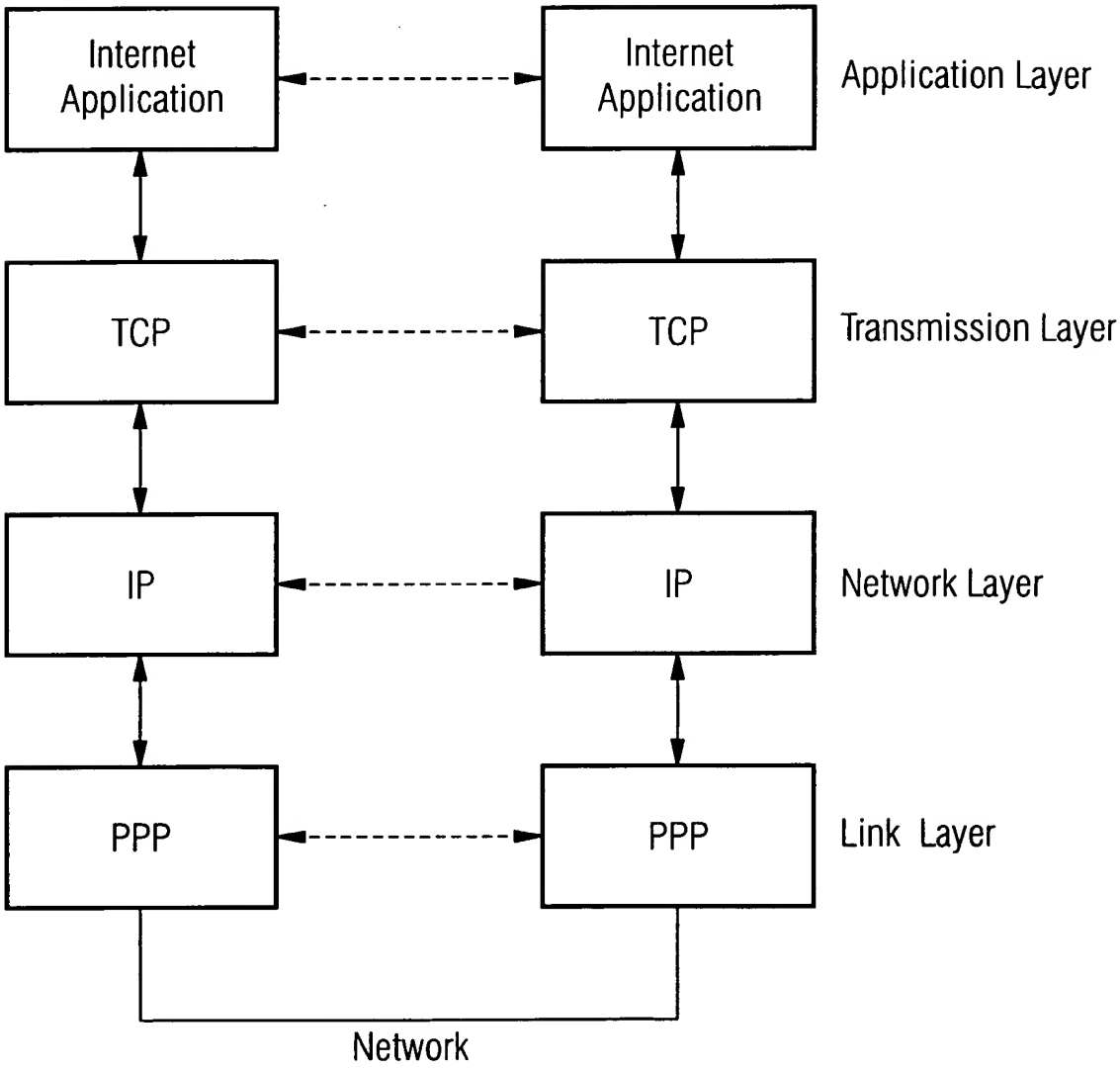

Internet Application
Internet Application
Application Layer
TCP
TCP
Transmission Layer
IP
IP
Network Layer
PPP
PPP
Link Layer
Network

FIG. 3

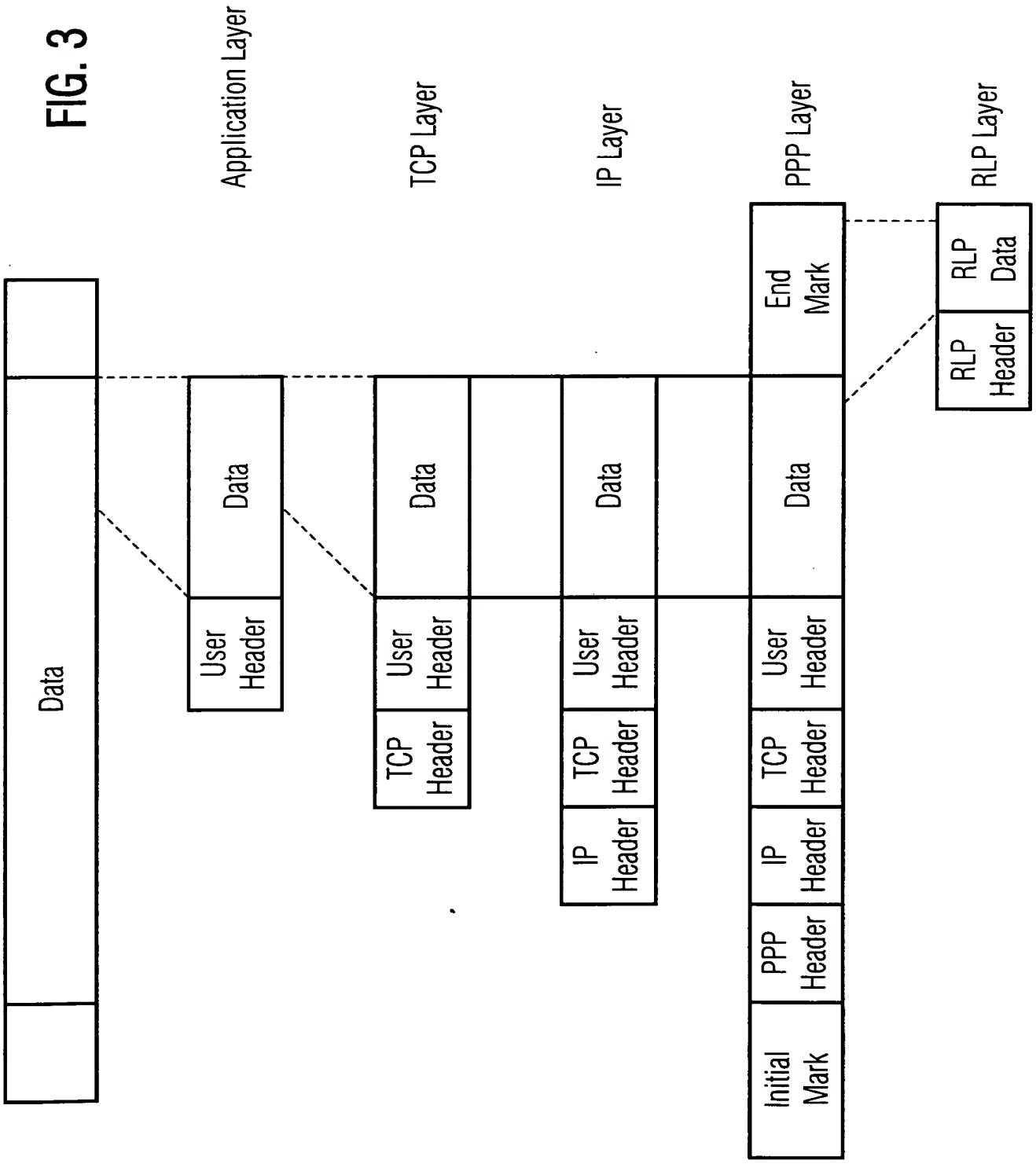

Application Layer
TCP Layer
IP Layer
PPP Layer
RLP Layer
Data
User Header
Data
TCP Header
User Header
Data
IP Header
TCP Header
User Header
Data
Initial Mark
PPP Header
IP Header
TCP Header
User Header
Data
End Mark
RLP Header
RLP Data

FIG. 4

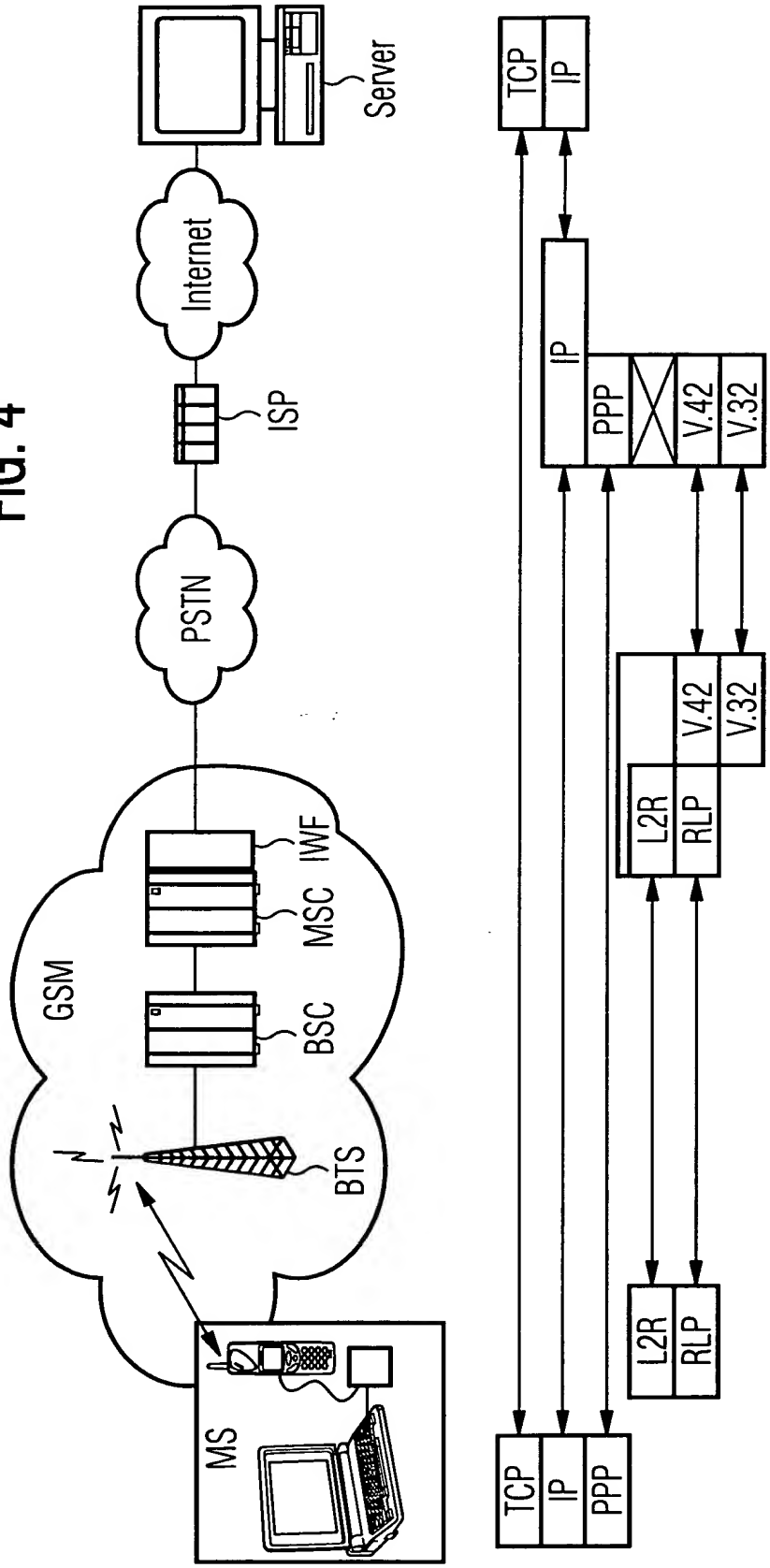

Server
Internet
ISP
PSTN
GSM
IWF
MSC
BSC
BTS
MS
TCP
IP
PPP
V.42
V.32
L2R
RLP

FIG. 5

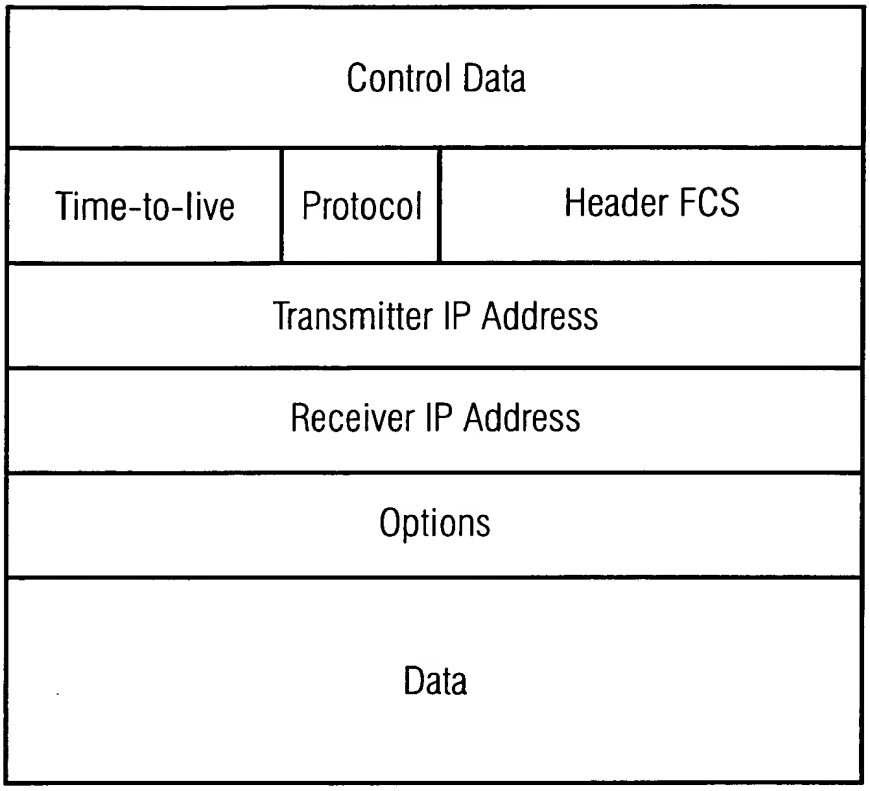
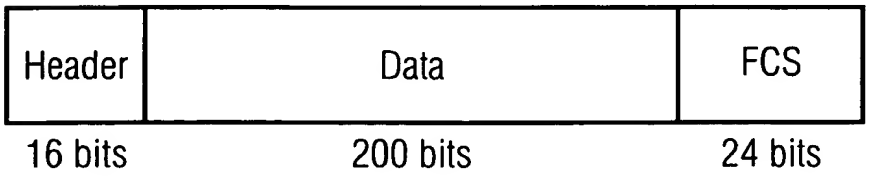

Control Data
Time-to-live
Protocol
Header FCS
Transmitter IP Address
Receiver IP Address
Options
Data

FIG. 6


Header
Data
FCS
16 bits
200 bits
24 bits

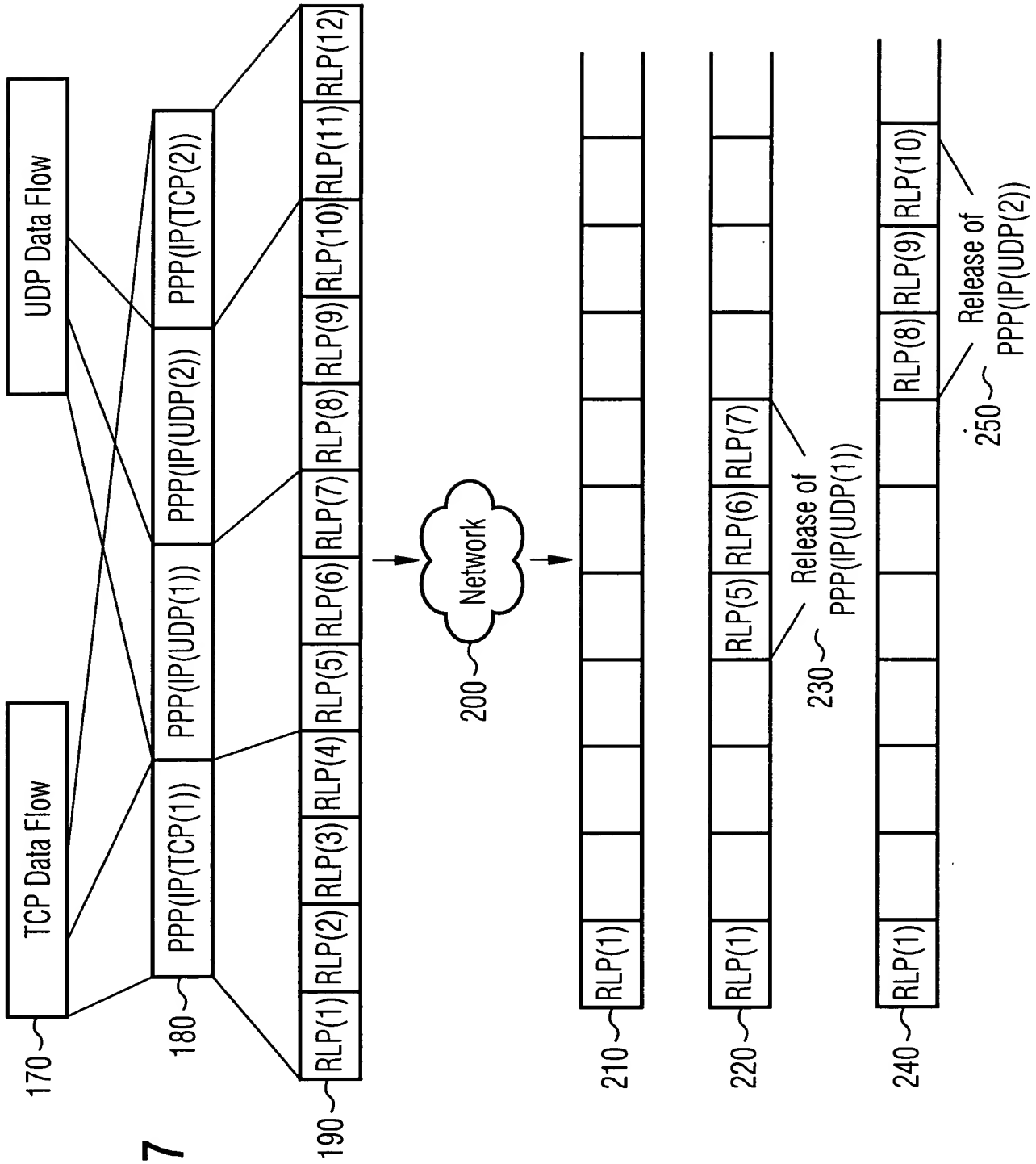
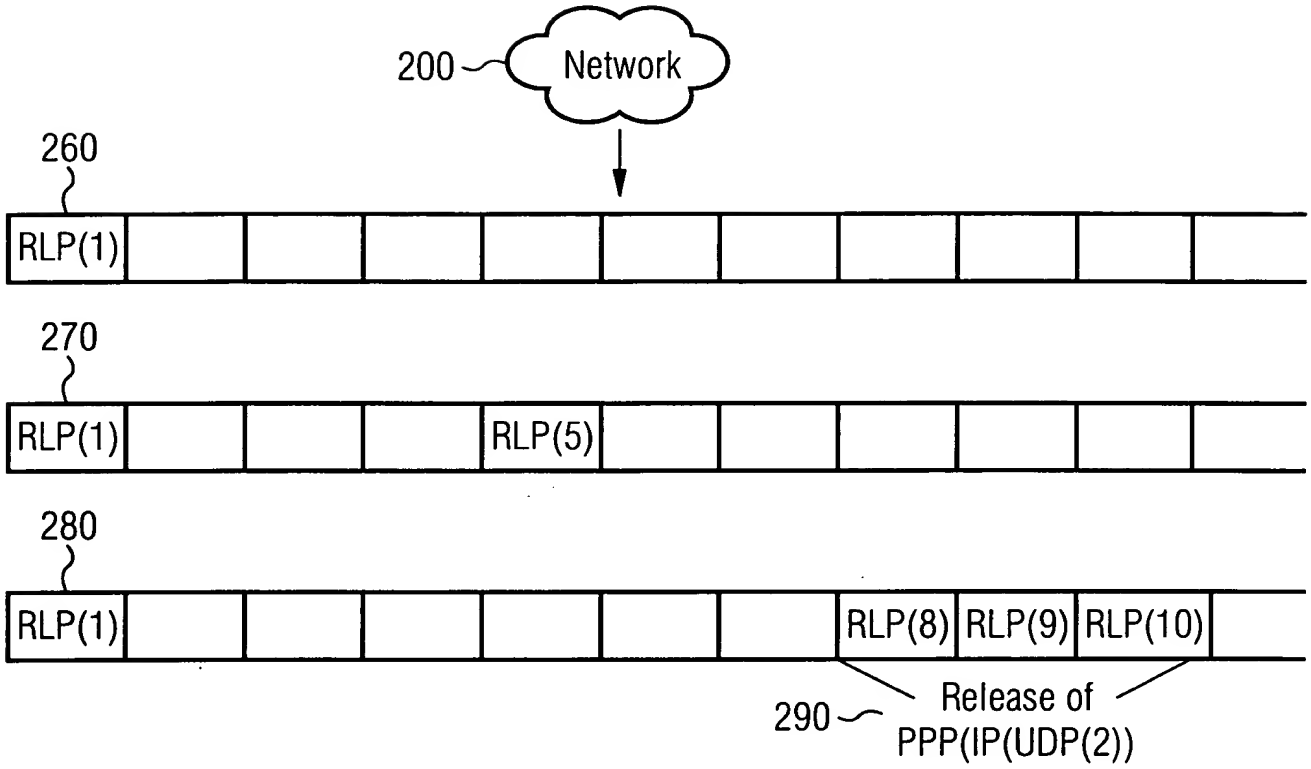

TCP Data Flow
UDP Data Flow
170
PPP(IP(TCP(1))
PPP(IP(UDP(1))
PPP(IP(UDP(2))
PPP(IP(TCP(2))
180
RLP(1)
RLP(2)
RLP(3)
RLP(4)
RLP(5)
RLP(6)
RLP(7)
RLP(8)
RLP(9)
RLP(10)
RLP(11)
RLP(12)
190
Network
200
RLP(1)
210
RLP(1)
RLP(5)
RLP(6)
RLP(7)
220
Release of
PPP(IP(UDP(1))
230
RLP(1)
RLP(8)
RLP(9)
RLP(10)
240
Release of
PPP(IP(UDP(2))
250

FIG. 7

FIG. 8


200
Network
260
RLP(1)
270
RLP(1)
RLP(5)
280
RLP(1)
RLP(8)
RLP(9)
RLP(10)
290
Release of
PPP(IP(UDP(2))